

### A New Counter-Force Strategy for Air Warfare

EDITOR'S NOTE: Here is a new strategy for the United States in the H-bomb era, drawn up by an experienced military planner.

"Massive retaliation," in this strategy, no longer would threaten enemy cities. Both big bombers and aircraft carriers become largely outmoded. Total-war theories become "100 per cent foolish" in the nuclear age. But war is expected to last only a few weeks.

The ideas contained in this plan are known to have been the subject of serious discussions recently among high military officers.

Author of the plan—Richard S. Leghorn, Colonel, USAFR—was on active duty in the Office of Development Planning in the United States Air Force until 1953.

Colonel Leghorn served in World War II as an air-group commander and photo-reconnaissance pilot throughout the European campaign. Later he participated in the Bikini atomic tests and was responsible for the gathering of important data from aircraft encircling the scene. He is a graduate in physics of Massachusetts Institute of Technology, and is now one of the executives of the Eastman Kodak Company.

Tactical use of nuclear weapons against solely military targets is the basis of his plan. Enemy industry would not be threatened. Neither would enemy population centers, unless U. S. cities were hit first.

"Nuclear punishment" to fit the crime would be inflicted on any aggressor—against his armies in the case of a ground attack, against air bases in the event of air attack, against his borders in case he tries to support an aggression against a neighbor.

For civil defense within U. S., the plan calls for shutting down all major cities when war begins, moving populations out and small caretaker forces in, for the few weeks of war's "decisive phase."

For waging war, this strategy envisages using only forces and stockpiles that are in "fighting position" at war's outset. Industrial build-up during war becomes less important, with time for the decision measured in days or weeks.

"Small wars" are covered by the plan, too. Tactical attack with nuclear weapons would compel the aggressor either to quit or lose his aggressive forces. In this way, the author insists, both Korea and Indo-China could have been won by the West and Formosa could be held now.

Basic revision of the armed services' organization is called for, finally, with five types of military command replacing old Army, Navy and Air Force commands.

Conclusions concerning the plan are the views of Colonel Leghorn, and not necessarily those of this magazine.

# Col. Richard S. Leghorn (United States Air Force Reserve)

# tells— HOW NUCLEAR WAR MAY BE FOUGHT



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#### by Col. Richard S. Leghorn

The thesis of this article is that the President of the United States should consider announcement of the following policy:

"If any of our allies or the United States itself is attacked by an aggressor with conventional armies, the United States will punish the aggressor by using tactical nuclear weapons to destroy his attacking units in the battle zone and the military installations in his immediate rear areas.

"If any such aggression is supported by conventionally armed aircraft, the United States will punish the aggressor by hot pursuit in the air and nuclear attack on his air bases.

"If the United States or any of its allies are attacked with nuclear weapons, the United States will use nuclear weapons to destroy instantly and utterly the nuclear stockpiles of the aggressor and the nuclear delivery capability of the enemy.

"The United States unilaterally renounces H-bomb and A-bomb attack on hostile cities, unless the cities of the Free World are first attacked with weapons of mass effect."

#### First: GROPING FOR A MILITARY POLICY

Soviet and chinese imperialism and the fundamental clash between Communist doctrine and Western political philosophy today present the United States and the Free World with the gravest challenge we have ever faced. The years since World War II have witnessed the West coming to grips with this challenge. A decade of cold war has been a frightening experience as we have struggled to meet first one onslaught and then another with improvised policies.

Since the Soviet threat was publicly recognized in 1946, we have examined and rejected as national policies the extremes of peace-at-any-price, and preventive war. We toyed with the idea of "Fortress America." We found containment

too negative and liberation premature. We are now pledged uncomfortably to peaceful co-existence.

Although remnants still appear, we early discarded the peace-at-any-price thinking of appeasement and unilateral disarmament. Horse sense and experience have taught us that the only way to deal with an aggressor is by marshalling strength and displaying a will to use it. Preventive war, the other extreme, continues to be advocated in one form or another, particularly by the militaristic—though not by our military leaders. The Fortress America concept was quickly labeled as Maginot Line mentality and was short-lived; it is a vestige of isolationism, whose spirit lives on among national-

ists and go-it-aloners who would like to believe we can substitute a defensively fortified America for the earlier, natural isolation of our occan-bound continent.

Containment was the initial response to Soviet expansion. But containment was a reaction, it was negative and therefore frustrating as a long-term policy. It left the initiative with our opponent. It led us to abandon captive peoples behind the Iron Curtain and embrace the status quo on our side, regardless of how incompatible it may have been with our concepts of democracy and just rule.

In early 1953 we had a premature burst of enthusiasm to do more than take a negative approach, but we found that liberation called for too much initiative, too soon. Bold action, even by non-military means, was feared by our allies to invite Soviet atomic blows. This fear was unrealistic since destruction of the U.S. and exploitation of an undamaged and enslaved Europe constitute the logical Soviet objective. Nonetheless, it was a political fact,

Next we flirted with peaceful co-existence. This is a strange concept for America, not only because it was Lenin's label to denote a period of Communist consolidation before the next advance. In the first place, it implies that war can be avoided. As recently pointed out by Sir John Slessor, war with the Soviets cannot be avoided, only prevented—which is quite a different thing. Peace is not achieved in a community of nations just because everybody believes it desirable. War must be prevented, peace sought actively.

Peaceful co-existence implies there is no need to act to enforce the peace—that the community of nations is somehow different from other communities of human beings. Second, this concept implies that we can relax and forget the declared Soviet ambition to dominate the world, for which they continue to arm and agitate while endeavoring to conceal their aim with the big lie of "co-existence" propaganda—sheep's—clothing for the Soviet bear. Third, peaceful co-existence pretends that evil is not there, and obliges callous neglect of those whom misfortune has imprisoned under the yoke of Soviet tyranny. Peaceful co-existence is a false step in attempts to find a satisfactory course between containment and liberation.

The policy I propose we consider is the pursuit of enforced competitive peace. Two operative ideas are embodied in this concept. The pursuit of enforced competitive peace implies a coordination of force and positive political competition. Deterrent force can prevent aggression, anywhere on the globe. Thus protected, we can wage political competition against Communism.

The enforcement of peace is a long-acknowledged task of human society. The problem is no different between nations than between individuals. Public peace has always been maintained by the exercise of punishment. Peace is betained when punishment fits the crime and when punis well-known beforehand to any who might count violating it.

Until international authority is empowered to infiguate punishment to enforce world peace, nations my together to meet the problem through systems of a security. With its nuclear plenty and dynamic econo United States is the strongest member of the Free We have begun to accept our broad responsibilities a ognize that we must lead the Free World in the enforce of peace, until the day when a freshly constituted Nations has authority commensurate with that sibility.

The competitive spirit is psychologically apperature Americans and is compatible with our instinctive tism; we would relish competition with the Soviets of which system can provide the best economicand moral climate. Out of enlightened self-interests is on the competitive aspect would impel us to our support of reform movements in Africa and munist Asia, and to identify ourselves with the interest aspirations of peoples instead of regimes, as henceessitated by emphasis on containment at any price.

The pursuit of enforced competitive peace enabtake the initiative. It is a policy of containment only tary respects; it is affirmative in a political sense, identify vulnerable spots behind the Curtain, and cases, bring non-military pressures to bear. In prangible terms, we can extend to all oppressed and peoples a warm welcome to join the Free World.

Long-term competition under conditions of enforce can bring changes behind the Iron Curtain. Conce Marx, Communist doctrine has undergone major revise under Lenin and later under Stalin. The Malenkov in is now at hand, and there is no reason not to expect adaptation. Forever faced with our deterrent force an petitive strength, Soviet policy can be compelled to repremise that capitalism must collapse, and its object world domination.

To achieve these aims, the United States must rely its own power. Insofar as possible we desire to supp this power with the collective strength of like-minded It may be our desire eventually to transfer to intern authority the responsibility for and control of the meenforcing peace.

But consider first what we face in efforts to enforce What does conflict in the nuclear age mean and hos prepared are we to prevent it?

### Second: ANOTHER LOOK AT DEFENSE

#### I. The Facts of Nuclear Life

AMERICANS ARE WORRIED AND UNEASY. One swift decade has seen war's destruction measured successively in tons, kilotons, and megatons. In nuclear war, names on casualty lists will be replaced by estimates in megadeaths. The measure of human anguish in war has been multiplied one million times.

As we learn more and more about the H-Bomb, new aircraft and guided missiles, and Soviet successes in military technology, we realize our security is shrinking. The cost of adequate defense mounts as the armament race intensifies. Short of surrender and without recourse to preventive war, is there no end to this trend toward less security at higher cost?

In the face of our difficulties, it is useful to examination salient features of the current military situation.

#### 1. The Soviets have nuclear sufficiency.

They have a quantity sufficient, in case they choose their weapons in this manner during World War III, stroy so many of the population, cultural and proceenters of the West that we would lose, whether we war or not. The Soviets, who to date have announce experimental explosions plus a series of further test reasonably be presumed to have a few hundred bombs—they will have more tomorrow, hydrogen and atomic hundred assorted modern bombs on target can knock or half of U. S. industrial capacity and tens of millions of cans. The 100 largest cities of the NATO powers in W

Europe contain one quarter of its population and a greater fraction of its industrial capacity. Two hundred bombs on city targets would destroy the Western world.

#### 2. The U.S. enjoys nuclear plenty.

We have enough to satisfy not only all military needs, but also enough to begin a major program to develop atomic resources for peaceful use. It was publicly reported some time ago that the number of bombs in the stockpile would not be many years in reaching five figures. Since then new techniques have been announced which enable us to make more bombs with the same amount of nuclear materials. In a war, we are very likely to find ourselves more limited by the number of aircraft than by the number of modern explosives. They vary in size from artillery shells and kiloton A-bombs for fighter bombers to the reported 20 megaton blast of our present H-bombs. These weapons can destroy any surface target in air base, a capital city, fleets of ships, troops in the field, and some targets buried underground. There is almost no limit to the type or number of targets we could destroy with our stockpile.

#### 3. Nuclear weapons systems are cheap.

It is much cheaper to accomplish a given amount of destruction with nuclear weapons than by conventional means of war. It has been estimated that the cost of killing urban populations with nuclear weapons is incredibly cheap, just a few dollars a death. It is also very cheap to destroy factories of military targets with nuclear hower.

military targets with nuclear power.
Dividing the total annual budgets of the AEC by the presumed number of bombs produced, we find a cost per bomb of the order of a million dollars. While these explosives are expensive themselves, very little of the cost of a military reapons system is in the shell or bomb-all but a very small fraction of the cost is in the military unit that will feliver the explosives, and in its supporting supply system. we can recall that it took 330 billion dollars in four years World War II to deliver the 2 megatons of high-explosives ppended by the United States-or roughly 15 billion dollars deliver 100 kilotons, the blast on one small-size modern eapon. Today 15 billion dollars annually will maintain a arge, modern Air Force, which can deliver many thousands larger nuclear blasts in a few days. Thus, even condering the effect of conventional bomb dispersion, we afi say that to accomplish a given amount of destruction, clear fire-power is many times cheaper than conventional e-power.

# There is neither in being nor in view any satisfactory defense against nuclear air attack.

If the Soviets chose to use nuclear weapons against West-European cities, they would have an easy time of it. decent appearance of their equivalent of the B-52 bomber, and prospects for air refueling their growing fleet of medium bet bombers, are ominous indications of what they might be able to do to important U.S. targets today and will certainly be able to do tomorrow. Strategic planning must recognize that the Soviets are no longer range-limited. Former Air becretary Finletter estimates they will be able to deliver a mortal blow next year.

The late General Vandenberg announced two years ago that at best the Air Force could shoot down about 30 per cent of attacking aircraft. Even if the billions since poured into air defense have realized the hopes of scientific and military planners and doubled the batting average, one in three enemy nuclear bombers getting through to target is a suicidal prospect. This amount of air defense for our cities and military bases is mandatory for partial protection and as a supplementary deterrent, making attack difficult and expensive for

the Soviets. But we cannot expect air defense to save America in the face of determined Soviet blows. At best, our improved radar-fighter screen only doubles the price of success to the Soviets.

Even more ominous is the IBM, the intercontinental ballistic missile, which returns to earth from the outer atmosphere with a velocity approaching that of a meteor, about 20 times the speed of sound, and against which a defense has scarcely been dreamed of. Ten years ago, the Germans were firing against London V-2 ballistic missiles with a range of a few hundred miles. They had thousand-mile missiles on the drawing board. For almost a decade now the Soviets have employed some of the same research facilities in East Germany and also the services of many German scientists and engineers. We can no longer afford to deprecate Soviet skill in inilitary technology, as their development of the MIG-15, the A-bomb, and the H-bomb attest. It would not be illogical to assume that with this scientific head start from East Cermany, plus their own historic interest in rockets, the Soviets have given priority to this intercontinental missile in the expectation that if successful, they might essentially skip the long range bomber stage in intercontinental weapons development. We were only four years ahead of the Soviets with the A-bomb and ten months with a thermonuclear explosion. It is very possible that we will lose the IBM race, whose conclusion is only years away.

When the Soviets successfully engineer this near-absolute weapon, our elaborate and costly radar-fighter screen will not be effective against it. Faced with hydrogen-headed missiles of meteoric re-entry speed, our cities will be virtually defenseless.

A further threat, emphasized by Attorney General Brownell and FBI Director Hoover in a nation-wide warning, is agent delivery. Covert attack might add to the seriousness of mass attack from the air.

There is also the menace of nuclear missiles launched from submarines. Against this form of attack, anti-submarine defense, as in the case of air defense, can at best only increase the price of success to the Soviets.

As for dispersion of population and industrial centers, Messrs. Cooper and McKean have recently itemized in Fortune the reasons why dispersal is of such questionable value. Against fall-out from a major hydrogen attack, defense is extremely difficult. While we must take all practicable steps including evacuation to save American lives, and must increase the cost of attack to the Soviets, no physical defense can provide adequate protection. More vital to the protection of our people is the ability to destroy Soviet nuclear weapons systems at their source in the USSR.

These are the four salient features of today's defense situation—Soviet nuclear sufficiency, U.S. nuclear plenty, the cheapness of nuclear weapons systems, and the impossibility of achieving acceptable security with any physical shield against nuclear air attack.

#### II. The Defense Problem

WITH THE FACTS OF NUCLEAR LIFE in mind, it becomes clear that a war of obliteration cannot produce victory in any real sense; both sides would lose formidably. Military action alone cannot bring victory in cold war. Yet without sufficient military strength we would lose in cold war. The only hope of gaining on Communism and Soviet imperialism is through nonmilitary action. You can't kill an idea with a pistol. But how do we get the military security that alone will free us for non-military action?

The defense debate so far has been chiefly concerned with military forces. What military units will give us more security

U. S. TACTICAL ATOMIC WEAPON
"We can bring our nuclear plenty to bear"

at less cost? More air wings, more divisions, supercarrier. Should we concentrate on "air-atomic power" or have by anced air, naval and ground forces?

Such discussion has not yet resolved the issue. It never call Until the security issue is thrashed out on the level of strates—strategy for acceptable security in the long term confliction with the Soviets—we shall never have the answers. The type of military forces needed can be settled only after the grastrategy issue has been resolved.

We now attempt to straddle two national strategies, neith of which is satisfactory, instead of evolving a clear coup of action clearly shaped to the need.

On the one hand, we rely on our capacity for instances. Massive Retaliation at times and places of our own choing. In the absence of any clarifying statements as to how we intend to use this power of annihilation, in generally presumed that if D-Day comes—whether throbungling or intent of either side—we would use all modern weapons to pulverize Russia—its airfields, its dustries, its cities, everything. Our failure to define istically just how we would use this capacity has tag the strategy of Massive Retaliation with five major jections:

- ▶ 1. As Indo-China demonstrated, it is no deterrent localized Communist military ventures. This is because a true threat only in relation to total war. In less serious cumstances, where lesser countermeasures are called Massive Retaliation is a bluff readily called to our embarment.
- ▶ 2. It engenders a climate of fear—fear of world destruct Massive Retaliation invites massive, nuclear counter-retaition. During the cold war the Soviets have profited immedly from this fear. They have turned the fear arising from proclamations to their advantage in "peace offensives," keep countries of the West divided, weak and neutral, uncommitted countries uncommitted.
- ▶ 3. In case World War III should come, Massive Retaliate implies that to win we would immediately undertake to sma everything in sight. To so invite Soviet counter-retaliation simply to threaten national suicide if World War III show happen. Still busy with the problems of reconstructing t small fraction of the world economy destroyed in Wor War II, we hesitate to contemplate reconstruction of t very large percentage which such a World War III woi leave in ruins. As World War II demonstrated, to carry c wanton massacre of largely guiltless peoples would solic unite any survivors in firm opposition to us and drive the into the hands of their regime. The prospect also makes morally uneasy. A war of attempts at mutual obliteration moral as well as practical nonsense. We can derive no sat faction from a policy which is confined to wreaking vengear for our deaths.
- ▶ 4. It is argued that Massive Retaliation is intended or as a deterrent to war. If war came, we would not, it is sa actually use our military power in this manner. "Ike wornever let the boys do it." But if we build our aircraft a bombs, and train all our crews to fight a war of obliterati it may well be impossible, when D-Day comes, for us fight any other kind of war.
- ▶ 5. Massive Retaliation minimizes the temporary advant, we hold by possession of a greater number of nuclear born To conduct Massive Retaliation, relatively few, large born are required. The Soviets have a sufficiency of bombs and U.S. and the Soviets will soon reach a stand-off in the of nuclear annihilation. The satisfactory strategy for us much be one which enables us to capitalize on our quantitative vantage. With Massive Retaliation, our excess can have lifect on the balance of power.

We also maintain today a conventional strategy dating from World War II. Pursuing this strategy has four major objections:

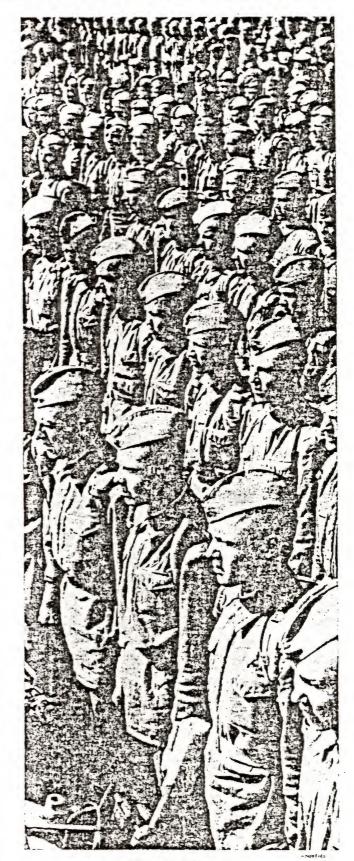
▶ 1. A conventional, or non-atomic, strategy hands the Soviets and their satellites a big military advantage. They are relatively stronger than we in conventional ground forces. Only our atomic superiority gives us preponderance of power today. If we gave up this advantage, the Soviets would be encouraged to experiment with military ventures. Their ground forces could quickly take Continental Europe and Asia. It is most uncertain that the Anglo-American industrial base could out-produce the entire Eurasian war economy sufficiently to mount a successful recapture of Europe and invasion of Russia. In the remote possibility that we could, it would be a victory so expensive that we would have lost what we were fighting for. World War I broke the power of France as a world leader and World War II almost broke the back of England. A non-atomic World War III might break the power of America.

2. Nuclear weapons are all that stand between us and the advance of massed Communist armies. To surrender their use almost guarantees our losing World War III, if not the cold war beforehand. Unless simultaneous and progressive reduction of other major weapons of war can be arranged imder enforceable conditions, we can never agree to an international ban on nuclear weapons alone, even if the Soviets would alter their intransigence on inspection and enforcement. Without our agreement, no ban is possible on fruclear weapons alone. It is unnecessary, therefore, for us to plan to fight a non-atomic war. Proponents of conventional forces argue for the maintenance of World War II armaments "just in case" nuclear war should be outlawed. But how can It be outlawed without our agreement and why should we lagree unless other major weapons are outlawed as well? The mational attempt to justify conventional forces should not be allowed to confuse the issue and add unnecessarily to the defense budget.

3. A non-atomic strategy is immensely expensive to prepare for as well as execute. To attempt enforcement of the peace by balancing Communist non-atomic power with congentional force would require a stupendous defense effort for the Free World. This effort would have to be maintained for the fany decades—not just a few years as in World War II. The communists direct more than twice the population controlled by the NATO and SEATO powers, and theirs can be regimented more readily for military and war-production purposes. Although they produce only 40 percent as much steel have such a program of universal military service and give have such a program of universal military service and give the so much consumer production that the necessary regimentation over the decades might back us into un-American thremes of statism.

4. In the cold war, pursuing a non-atomic strategy presents baffling predicament. Either we lag behind Soviet military production and cannot stop Communist expansion by conventional means, or we organize our industry and manpower for war so that we lack sufficient resources to devote to the development of free centers of political, economic and social strength around the Soviet periphery. Instead we sink toward the Soviet level of regimentation. Heads, the Soviets win with their superior non-atomic military power; tails, the Free World loses freedom, whose preservation is the very object of our struggle.

In attempting to pursue World War II and nuclear strategies simultaneously, we have badly confused the tools for each type of war. We try to put conventional elements of military power in a nuclear strategy, and nuclear elements in a con-



SOVIET GROUND TROOPS
"They are relatively stronger . . . in conventional forces"